

Current Transducer

Applications

For the electronic measurement of currents: AC, DC IMPL.,etc.,with galvanic isolation between the primary (high power) and the secondary (electronic) circuits.



Advantages	Applications	Standards
Excellent accuracy	AC variable speed drives	EN50178
Very good linearity	Battery supplied applications	EN50155
Low temperature drift	converter /inverter	
Wide frequency bandwidth	UPS/SVG	
Optimized response time		

Main electrical data		
$I_{PN}$ (A)	Primary nominal current rms	300
$I_P$ (A)	Primary current measuring range	0~±500
	Conversion ratio	1:2000
$V_C$ (V)	Supply voltage	+/-12V~+/-15V(+/-5%)
$I_{SN}$ (mA)	Secondary nominal current rms	150mA
$R_M$ (Ω)	Measuring resistance	
	$R_{Mmin}$ $R_{Mmax}$	
	@±12V, ±300A: 0Ω~30Ω	
	@±12V, ±500A: 0Ω~7Ω	
	@±15V, ±300A: 0Ω~43Ω	
	@±15V, ±500A: 0Ω~17Ω	
$I_c$ (@±15V)	Current consumption	≤20mA+ Secondary output current $I_{SN}$
	Isolation test: Between the primary circuit to the secondary circuit	6 kVrms/50Hz/1min

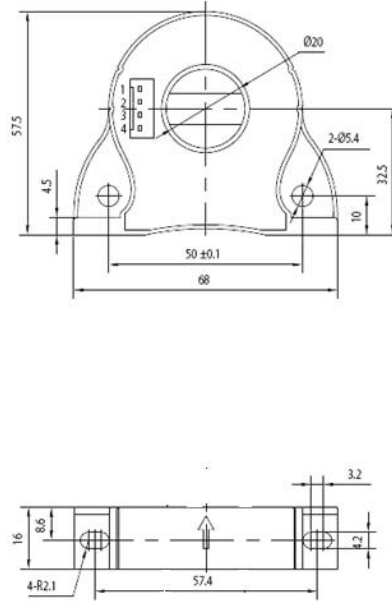
Accuracy - Dynamic performance data	
$\delta i$	≤±0.5%

(@I <sub>PN</sub> , T <sub>A</sub> =25°C)	Overall Accuracy	≤±0.5%
L (@I <sub>PN</sub> , T <sub>A</sub> =25°C)	Linearity error	<0.1%
I <sub>O</sub> (@I <sub>p</sub> =0, T <sub>A</sub> =25°C)	Offset current	≤±0.2mA
I <sub>OT</sub>	Thermal drift	≤ ±0.6mA (-25°C~+85°C)
t <sub>r</sub>	Response time to 90% of I <sub>PN</sub> step	≤1us
di/dt	di/dt Accurately followed	>50A/us
BW	Frequency bandwidth(-1dB)	DC..100kHz

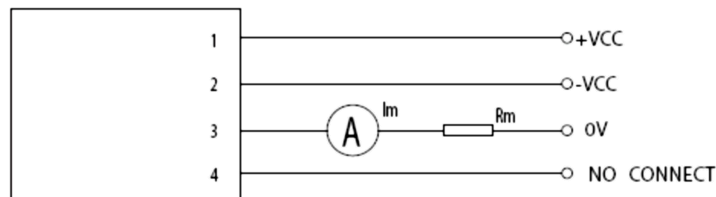
**General data**

T <sub>a</sub>	Ambient operating temperature	-25°C~+85°C
T <sub>s</sub>	Ambient storage temperature	-40°C~+90°C
m	Mass	≤100g

**Dimensions (in mm)**



**Connection**



Mechanical characteristics		Remark
General tolerance	$\pm 1$ mm	1. When measuring the current direction of arrow mark on direction and sensor, the sensor output ISN is positive.
Transducer fastening ( Recommended )	2 hole $\varnothing 4.2$ mm 2 M4 steel screws	2. Product secondary side connecting line optimization shielding wire, cable shielding layer close to the product end can connect chassis, negative power or power 0V.
Transducer fastening ( Recommended )	2 hole $\varnothing 5.4$ mm 2 M5 steel screws	3. Power sensor mounting screw hole of the vertical degree requirements: requirements in the national standard grade 8 or above (or below 0.06).
Recommended fastening torque	2.5 N • m	4. Sensor mounting surface flatness requirements:  (a) Planeness national standard installation grade 11 or above (or surface fluctuation is less than 0.25 mm);  (b) When mounting surface with a small round convex platform design flatness requirement of national standard grade 12 or more (or less than 0.5 mm) in plane ups and downs;
Bus bar ( Recommended )	$\varnothing 20$ mm	
Connection of secondary	Molex 6410	5. Did not note the tolerance + / - 0.5 mm;